**The NOAA RAP/HRRR orographic drag suite addition to WRF**

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Enhancements to the WRF orographic gravity wave drag (OGWD) scheme, developed by NOAA's Global Systems Laboratory and implemented in the operational RAP/HRRR numerical weather prediction models, are available in the latest version of the WRF and are introduced in this talk. The new OGWD physics suite consists of modified forms of the standard WRF gravity wave drag and low-level blocking schemes, along with two new schemes: a small-scale OGWD scheme, typically active in highly stable nocturnal planetary boundary layers, and a turbulent orographic form drag scheme. These latter schemes account for unresolved topography down to ~1km horizontal grid spacing.